

# CBS Antibody (NT)

Rabbit Polyclonal Antibody Catalog # ABV11279

## Specification

# CBS Antibody (NT) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW

WB <u>P35520</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 60587

## **CBS Antibody (NT) - Additional Information**

Gene ID 102724560;875

**Positive Control** 

Western blot: Raji, Rat brain and cerebellum tissue lysate, IHC: human hepatocarcinoma, FACS: Ramos cells, IF: 293 cells Western blot: ~1:1000, IHC: ~1:50-1:100, IF: ~1:10-1:50, FACS: ~1:10-1:50.

## Application & Usage

**Other Names** CBS; Cystathionine beta-synthase; Beta-thionase; Serine sulfhydrase

Target/Specificity CBS

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100  $\mu$ l of antibody in PBS with 0.09% (W/V) sodium azide

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

### **Precautions**

CBS Antibody (NT) is for research use only and not for use in diagnostic or therapeutic procedures.



# CBS Antibody (NT) - Protein Information

# Name CBS

Function

Hydro-lyase catalyzing the first step of the transsulfuration pathway, where the hydroxyl group of L-serine is displaced by L- homocysteine in a beta-replacement reaction to form L-cystathionine, the precursor of L-cysteine. This catabolic route allows the elimination of L-methionine and the toxic metabolite L-homocysteine (PubMed:<a href="http://www.uniprot.org/citations/23981774" target="\_blank">23981774</a>, PubMed:<a href="http://www.uniprot.org/citations/20506325" target="\_blank">20506325</a>, PubMed:<a href="http://www.uniprot.org/citations/23974653" target="\_blank">23974653</a>). Also involved in the production of hydrogen sulfide, a gasotransmitter with signaling and cytoprotective effects on neurons (By similarity).

Cellular Location Cytoplasm. Nucleus

#### **Tissue Location**

In the adult strongly expressed in liver and pancreas, some expression in heart and brain, weak expression in lung and kidney. In the fetus, expressed in brain, liver and kidney

# CBS Antibody (NT) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## CBS Antibody (NT) - Images





# CBS Antibody (NT) - Background

Strongly expressed in human liver and pancreas, with weaker expression in heart and brain, the cytoplasmic protein cystathionine b-synthase (CBS) operates in the first step of homocysteine transulfuration. CBS, which belongs to the cysteine synthase/cystathionine b-synthase family of proteins, catalyzes the formation of cystathionine from the thrombogenic amino acid homocysteine using pyridoxal phosphate cofactor. Allosteric activation by adenosyl-methionine regulates CBS activity. Deficiencies in CBS are associated with homocystinuria, a recessively inherited error in sulfur amino acid metabolism that affects many organs and tissues. Symptoms of homocytinuria include arteriosclerosis, thrombosis, dislocated optic lenses, mental retardation and skeletal abnormalities.